

WHAT IS CLAIMED IS:

- 1 1. A product rate calculation system comprising:
2 a database interface operable to request and receive product rate information
3 from a database, the product rate information including at least one
4 product rate expression;
5 a product rate information cache storing product rate information;
6 an expression evaluation routine operable to parse a product rate expression
7 stored in the product rate information cache into at least one token, and
8 operable to evaluate the at least one token to determine a product rate;
9 and
10 a client interface operable to provide the product rate to a client application
11 running on a computer system.
- 1 2. The product rate calculation system of claim 1 wherein the product rate
2 information includes at least one multi-dimensional table of data.
- 1 3. The product rate calculation system of claim 2 wherein at least one
2 dimension of the at least one multi-dimensional table is indexed by consumer
3 information provided to the client interface.
- 1 4. The product rate calculation system of claim 1 wherein the at least one
2 token is a plurality of tokens, at least one of the plurality of tokens being an operand,
3 and at least one other of the plurality of tokens being an operator.
- 1 5. The product rate calculation system of claim 4 wherein the operand is one
2 of a constant numeric value, a variable, a logic value, a function, and a string; and
3 wherein the operator is one of a numeric operator and a logic operator.
- 1 6. The product rate calculation system of claim 4 wherein the operand and the
2 operator are arranged in the product rate expression following one of post-fix, pre-fix,
3 and in-fix notation.

1 7. The product rate calculation system of claim 1 wherein product rate
2 information is insurance product rate information.

1 8. The product rate calculation system of claim 1 wherein the expression
2 evaluation routine uses consumer information provided to the client interface to
3 evaluate the at least one token.

1 9. The product rate calculation system of claim 1 further comprising a client
2 application running on a computer system and being configured to:
3 provide product information, including the product rate, to a user;
4 provide consumer information to the client interface; and
5 receive the product rate.

1 10. The product rate calculation system of claim 9 wherein the product
2 information is product information for at least one of home insurance, life insurance,
3 health insurance, automobile insurance, and renter's insurance.

1 11. The product rate calculation system of claim 9 wherein the client
2 application running on a computer system is a web server application.

1 12. The product rate calculation system of claim 11 further comprising a web-
2 client computer system, the computer system and the web-client computer system
3 being coupled via a network.

1 13. The product rate calculation system of claim 1 wherein at least one of the
2 database interface, the product rate information cache, the expression evaluation
3 routine and the client interface is encoded in a computer readable medium as
4 instructions executable on a processor, the computer readable medium being one of an
5 electronic storage medium, a magnetic storage medium, an optical storage medium,
6 and a communications medium conveying signals encoding the instructions.

1 14. The product rate calculation system of claim 1 further comprising a
2 database operable to receive a product rate information request from the database
3 interface and provide product rate information to the database interface, the database
4 including at least one of the product rate expression, a multi-dimensional table of data,
5 and a numeric value stored as a database record.

1 15. A method calculating a product rate comprising:
2 loading product rate information including at least one product rate expression
3 from a database;
4 storing the product rate information in a cache;
5 receiving a request for a product rate from a client application running on a
6 computer system;
7 parsing the at least one product rate expression stored in the cache into at least
8 one token;
9 evaluating the at least one token to determine the product rate; and
10 transmitting the product rate to the client application running on the computer
11 system.

1 16. The method of claim 15 wherein the product rate information includes at
2 least one of a multi-dimensional table of data and a numeric value.

1 17. The method of claim 15 wherein the product rate information is stored as
2 a plurality of records in the database.

1 18. The method of claim 15 wherein the receiving a request further comprises
2 receiving consumer information from the client application running on the computer
3 system, the consumer information being used to evaluate the at least one token to
4 determine the product rate.

1 19. The method of claim 15 wherein the product rate information is insurance
2 product rate information.

1 20. The method of claim 15 wherein the loading and storing are performed
2 once, and wherein the receiving, parsing, evaluating, and transmitting are performed a
3 plurality of times.

1 21. The method of claim 15 wherein the at least one token is a plurality of
2 tokens, at least one of the plurality of tokens being an operand, and at least one other
3 of the plurality of tokens being an operator.

1 22. The method of claim 21 wherein the operand is one of a constant numeric
2 value, a variable, a logic value, a function, and a string; and wherein the operator is
3 one of a numeric operator and a logic operator.

1 23. The method of claim 21 wherein the operand and the operator are
2 arranged in the product rate expression following one of post-fix, pre-fix, and in-fix
3 notation.

1 24. The method of claim 15 wherein the evaluating the at least one token to
2 determine the product rate further comprises at least one of:

3 performing a mathematical operation;
4 performing a logical operation; and
5 retrieving data from a multi-dimensional table of data stored in the cache.

1 25. The method of claim 15 encoded in a computer readable medium as
2 instructions executable on a processor, the computer readable medium being one of an
3 electronic storage medium, a magnetic storage medium, an optical storage medium,
4 and a communications medium conveying signals encoding the instructions.

1 26. A system for calculating product rates comprising:
2 a processor configured to request and receive product rate information from a
3 database, the product rate information including at least one product
4 rate expression; and

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5 a memory cache configured to store the product rate information including the
6 at least one product rate expression; the processor being further
7 configured to evaluate the at least one product rate expression by
8 parsing the at least one product rate expression into at least one token
9 and evaluating the at least one token to determine a product rate.

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